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10/657,509	09/08/2003	Kazuaki Nakamura	KON-1818	9322

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EXAMINER

CHEA, THORL

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/657,509

Applicant(s)

NAKAMURA ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-10, 13, 15-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oya et al (US 2001/0051319).

See Oya pages 52-53 claim 1-6 in claim 1 discloses a photothermographic material comprising at least (a) a photosensitive silver halide, (b) a reducible silver salt, (c) a reducing agent represented by the following formula (1), (d) a binder, and (e) a phenol compound represented by the following formula (2) on the same side of a support: 13wherein, in the formula (1), V<sup>sup.1</sup> to V<sup>sup.8</sup> each independently represent hydrogen atom or a substituent, L represents a bridging group consisting of --CH(V<sup>9</sup>)-- or --S--, and V<sup>9</sup> represents hydrogen atom or a substituent; and wherein, in the formula (2), R<sup>1</sup> and R<sup>2</sup> each independently represent hydrogen atom or a substituent, X<sup>1</sup> to X<sup>3</sup> each independently represent hydrogen atom or a substituent, provided that the substituents represented by X<sup>1</sup> to X<sup>3</sup> do not represent hydroxy group, and when the

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substituents represented by  $X^1$  to  $X^3$  are bonded to the phenol ring via nitrogen atoms,  $X^1$  to  $X^3$  represent a nitrogen-containing heterocyclic group or a group represented as  $--NH--C(.dbd.O)--R^{sup.4}$  where  $R^{sup.4}$  represents a substituent having 8-40 carbon atoms, or the substituents represented by  $R^1$ ,  $R^2$  and  $X^1$  to  $X^3$  may be bound to each other to form a ring. It is also on page 3, column 1, [0027] disclosed that  $V^9$  is a cyclic alkyl; page 3, column 2, [0028] that  $V^9$  is a heterocyclic group having 2-20 carbon atom, an aryl group, for example phenyl, p-methylphenyl, naphthyl; page 8, compound (II-4), (II-6) having formula within the scope of formula (2) of the claimed invention. The scope of  $R_{11}$  and  $R_{12}$  encompasses the scope of the  $V^9$  of Oya et al, and the scope of the formula (2) is within the scope of the compound (II-4) and (II-6). Therefore, the invention as claimed lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use any substituents associated with the phenol compound and the compound of formula (2) taught in Oya et al with a reasonable expectation of highly useful material with high sensitivity, high image density, and low fog.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fukui et al (US 2002/0102502) and Patent Specification 1543266 (PS'266).

See the material discloses on pages 38-41, claims 1-20, especially the compound of formula (I), (II) in claim 1, the compound of formula 9III) in claim 11; the molar ratio of compound of formula (I) to formula (II) of 0.001 to 0.2. See also the generic formula (III), and the its exemplified compound on page 6-10. The compound of formula (1) of Fukui contains L as  $-CHR^{13}-$  wherein  $R^{13}$  is an hydrogen or an alkyl group having 1-15 carbon atoms. See page 3, column 1. Fukui et al fails to specifically discloses whether  $R_{11}$  and  $R_{12}$  are each a hydrogen

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atom, membered non-aromatic ring group or a 5- or 6-membered aromatic ring group, provided that R11 and R12 are not hydrogen atoms at the same time claimed in the present invention. However, the groups as claimed have been known as an equivalent to the alkyl group of Fukui and discloses in PS'226 on page 15, lines 10-15 which discloses the alkyl, aryl, and phenyl group as substituent for the phenol compound useful in heat-developable material. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to associate a group known as equivalent to the alkyl group taught in PS'226 such as the aryl group or phenyl group with the phenol compound taught in Fukui et al with a reasonable expectation of achieving a highly useful photothermographic material that give an image with good tone, and thereby provide a material as claimed.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/336,920 in view of Fukui et al (US 2002/0102502).

This is a provisional obviousness-type double patenting rejection.

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Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material claimed in the copending application to close to pure black tone, and thereby provide a material as claimed.

7. Claims 1-14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application No. 10/631,910 in view of Fukui et al (US 2002/0102502).

This is a provisional obviousness-type double patenting rejection.

Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material claimed in the copending application to close to pure black tone, and thereby provide a material as claimed.

8. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,699,649 in view of Fukui et al (US 2002/0102502).

Fukui et al disclose the use of the compound within the scope of formula (2) to provide the tone of photothermographic material close to pure black tone. See page 1 [0010]; and page 38-41, claims 1-20., compound of formula (II), and formula (III). It would have been obvious to the

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worker of ordinary skill in the art at the time the invention was made to use the compound of formula (II) or (III) taught in Fukui et al to provide the material claimed in the U.S. Patent No. 6,699,649 to provide the tone thereof close to pure black tone, and thereby provide a material as claimed.

### *Response to Arguments*

9. Applicant's arguments filed March 16, 2005 have been fully considered but they are not persuasive. It is the Examiner's position that the invention as claimed is either anticipated by Oya et al. Oya et al claim V<sup>9</sup> as substituent and the page 3 [0028] discloses that the preferred substituent include cyclohexyl, and aryl group. Therefore, the scope of V<sup>9</sup> as substituent claimed in Oya et al encompasses the scope of 5- or 6-membered aromatic ring claimed in the present claimed invention. Therefore, the claimed invention lacks novelty. The Declaration under 37 CFR 1.132 fails to overcome the rejection under 35 USC 102(b). "(E)vidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). The Declaration also fails to overcome the rejection under 35 USC 103(a) over Oya et al and Fukui et al. First, the process for showing the fog and sensitivity shown in the Declaration is not in accordance to the process taught in Oya et al on page 51, [0288] to [0291] wherein laser halving wavelength of 783 nm and laser output of 50 mW and developed using an apparatus in Fig. 1 in [0291]. Likewise, the process present in the Declaration is not in accordance to the process taught in Fukui et al on page 37, [0400]. In term of fog, the samples shown in the Declaration is higher than that disclosed in Oya et al, page 52, Table 1 and Fukui et al page 38, Table 3. The fog value disclosed in the prior art is between

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0.19-0.14, and 0.15. The material shows only a little change in sensitivity. The results shown in the Declaration would have therefore expected by the worker of ordinary skill in the art.

The rejections under the judicially created doctrine of obviousness-type double patenting shown above are maintained since no Terminal Disclaimer has been yet submitted.

10. The rejection in the paragraph 5 of the previous office is withdrawn in view of the certified English translation of the priority document JP 2002-265415 submitted with the response on March 16, 2005.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *thc*  
June 24, 2005

*Thorl Chea*  
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Primary Examiner  
Art Unit 1752